SUBCHAPTER K: STORAGE, TREATMENT, AND REUSE PROCEDURES FOR PETROLEUM-SUBSTANCE CONTAMINATED SOIL

§334.481. Definitions.

Except as provided in this subchapter, the following words and terms, when used in this subchapter, shall have the meanings prescribed in §334.2 of this title (relating to Definitions), unless the word or term is redefined in this subchapter or unless the context clearly indicates otherwise.

Aboveground storage tank - A nonvehicular device (including any associated piping) that is made of nonearthen materials: located on or above the surface of the ground, or on or above the surface of the floor of a structure below ground, such as a mineworking, basement, or vault; and designed to contain an accumulation of petroleum products.

Active life - The period from the initial receipt of waste at the facility until the executive director receives certification of final closure.

Active portion - That portion of a facility where treatment, or storage operations are being or have been conducted and which is not a closed portion. (See also "closed portion" and "inactive portion.")

Activities associated with the exploration, development, and production of oil or gas or geothermal resources - Activities associated with:

- (A) the drilling of exploratory wells, oil wells, gas wells, or geothermal resource wells;
 - (B) the production of oil or gas or geothermal resources, including:
- (i) activities associated with the drilling of injection water source wells that penetrate the base of usable quality water;
- (ii) activities associated with the drilling of cathodic protection holes associated with the cathodic protection of wells and pipelines subject to the jurisdiction of the Texas Railroad Commission to regulate the production of oil or gas or geothermal resources;
- (iii) activities associated with gasoline plants, natural gas or natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants;
- (iv) activities associated with any underground natural gas storage facility, provided the terms "natural gas" and "storage facility" shall have the meanings set out in the Texas Natural Resources Code, §91.173;
- (v) activities associated with any underground hydrocarbon storage facility, provided the terms "hydrocarbons" and "underground hydrocarbon storage facility" shall have the meanings set out in the Texas Natural Resources Code, §91.173; and

(vi) activities associated with the storage, handling, reclamation, gathering, transportation, or distribution of oil or gas prior to the refining of such oil or prior to the use of such gas in any manufacturing process or as a residential or industrial fuel;

- (C) the operation, abandonment, and proper plugging of wells subject to the jurisdiction of the Texas Railroad Commission to regulate the exploration, development, and production of oil or gas or geothermal resources; and
- (D) the discharge, storage, handling, transportation, reclamation, or disposal of waste or any other substance or material associated with any activity listed in subparagraphs (A)-(C) of this paragraph, except for waste generated in connection with activities associated with gasoline plants, natural gas or natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants if that waste is a hazardous waste as defined by the administrator of the United State Environmental Protection Agency pursuant to the Federal Solid Waste Disposal Act, as amended (42 United State Code, §6901 et seq.)

Active geologic processes - Any natural process which alters the surface and/or subsurface of the earth, including, but not limited to, erosion (including shoreline erosion along the coast), submergence, subsidence, faulting, karst formation, flooding in alluvial flood wash zones, meandering river bank cutting, and earthquakes.

Application - Commission forms or other commission-approved writing on which an executive director registration is requested.

Aquifer - A geologic formation, group of formations, or part of a formation capable of yielding groundwater to wells or springs.

Area subject to active shoreline erosion - A coastal area where shoreline erosion has been documented within historic time.

Areal expansion of an existing facility - The enlargement of a land surface area of an existing petroleum-substance waste management facility from that described in a petroleum-substance waste registration.

Areas of direct drainage - Those land areas from which surface water runoff could flow into a lake or other surface water used to supply public drinking water.

Authorized - Allowed in writing, by executive director registration, by order, by permit, by license, or by rule.

Authorized Representative - The person designated by the owner or operator to represent the facility or the person designated by the waste generator as the generator's representative.

Class A facility - A facility which will at any time store or treat petroleum-substance contaminated soils generated from more than one LPST site.

Class B facility - A mobile treatment unit which will treat petroleum-substance soils from only one LPST site at a time at that LPST site. The petroleum-substance soils treated at that site shall have originated from that site.

Class C facility - A facility located elsewhere than the LPST site but which will store or treat petroleum-substance soils generated from only that one LPST site.

Class D facility - A facility located at the LPST site which will store or treat the petroleum-substance soils generated from only that site.

Clean fill standard - Soil which is no longer considered waste, e.g. soil cleaned to less than .5 mg/kg for each constituent of BTEX, and less than 10 mg/kg for TPH.

Closed portion - That portion of a facility which an owner or operator has closed in accordance with the approved facility closure plan and all applicable closure requirements. (See also "active portion" and "inactive portion.")

Contingency plan - A document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of waste or waste constituents which could threaten human health and safety or the environment.

Critical habitat of a endangered species - An area that is determined by the United States Fish and Wildlife Service to be a critical habitat for an endangered species.

Designated facility - The authorized storage, treatment, or disposal facility that has been designated on the petroleum-substance waste manifest by the generator.

Discharge - The accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of waste into or on any land or water.

Disposal - The discharge, deposit, injection, dumping, spilling, leaking, or placing of any waste (whether containerized or noncontainerized) into or on any land or water so that such waste or any constituent thereof may enter the environment or be emitted into the air or discharged into or adjacent to any waters, including groundwater.

Disposal facility -- A facility or part of a facility at which waste is intentionally placed into or on any land or water or adjacent to any water, and at which such waste will remain.

Effective substitute -- A substance which may be used in the place of another substance for the same purpose without creating adverse environmental conditions.

Erosion - The group of natural processes, including weathering, deterioration, detachment, dissolution, abrasion, corrosion, wearing away, and transportation, by which earthen or rock material is removed from any part of the earth's surface.

Executive Director - the executive director of the Texas Water Commission, or its successor agency, or the executive director's designee.

Existing Portion - That land surface area of an existing waste management unit, on which wastes have been placed prior to the issuance of a registration.

Existing facility - Any petroleum substance contaminated soil storage, treatment or recycling facility registered under and in compliance with this subchapter on or prior to the effective date of this subchapter.

Facility - Includes structures, other appurtenances, and improvements on the land for storing or treating petroleum-substance waste. A facility may consist of several storage or treatment operational units. A facility may also be a mobile treatment unit.

Facility Operator - The person responsible for the overall operation of a facility or an operation unit (i.e., part of facility), e.g., the plant manager, superintendent, or person of equivalent responsibility for the regulated activity.

Facility Owner - The person who owns a facility or part of a facility.

Final closure - The closure of all waste management units at the facility in accordance with all applicable closure requirements so that waste management activities are no longer conducted at the facility unless subject to the provisions of this title.

Generator - Any person who produces petroleum-substance waste; any person who stores or treats petroleum-substance waste; any person who possesses petroleum-substance waste to be shipped to any other person; or any person whose act first causes the petroleum-substance waste to become subject to regulation under this subchapter.

Groundwater - Water below the land surface in a zone of saturation.

Hazardous waste - Any solid waste identified or listed as a hazardous waste by the administrator of the United States Environmental Protection Agency (EPA) pursuant to the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, 42 United States Code 6901 et seq., as amended.

Inactive portion - That portion of a facility which is not operated. (See also "active portion" and "closed portion".)

In operation - Refers to a facility which is treating or storing petroleum-substance waste.

In-situ treatment - The reduction of contaminant levels in soil or groundwater which is conducted without removing the contaminated media from the ground.

Interim registration - Authorization for a storage or treatment facility received by the facility up to September 25, 1992.

Land disposal facility - Any landfill, surface impoundment, waste pile, injection well, or other facility at which waste is finally disposed.

Land surface treatment facility - A facility, unit, or part of a facility at which waste is applied onto a liner on the soil surface during treatment.

Leaking petroleum storage tank (LPST) site - A site at which a confirmed release of a petroleum substance from an underground or aboveground storage tank has occurred. Petroleum-substance contamination which results from multiple sources may be deemed as one LPST site by the executive director.

Liner - A continuous layer of man-made materials, beneath and on the sides of a surface area which restricts the downward and lateral escape of waste, waste constituents, or leachate.

Management - The systematic control of the collection, storage, transportation, processing, reuse, treatment, recovery, and disposal of waste.

Maximum allowable inventory - The maximum amount of petroleum contaminated soil (not including soil that meets the "Clean fill standard" definition criteria) that may be at a registered facility at any one time. The maximum allowable inventory amount will be designated in the application for registration and will be the basis for the facility closure cost estimate required to meet financial assurance requirements.

New petroleum-substance waste management facility - Any facility to be used for the storage or treatment of petroleum-substance waste and which is not an existing petroleum substance waste management facility.

One hundred-year floodplain - Any land area which is subject to a 1.0% or greater chance of flooding in any given year from any source.

On-site - The same or geographically contiguous property which may be divided by public or private rights-of-way. Noncontiguous properties owned by the same person but connected by a right-of-way which that person controls and to which the public does not have access, is also considered on-site property.

Operator - Any person in control of or having responsibility for, the daily operation of an underground or aboveground storage tank system.

Owner - Any person who currently holds legal possession or ownership of a total or partial interest in the petroleum storage tank system. For the purposes of this chapter, where the actual ownership of an UST system or AST system is either uncertain, unknown, or in dispute, the fee simple owner of the surface estate where the UST or AST is located shall be considered the system owner, unless the owner of the surface estate can demonstrate by appropriate documentation (deed reservation, invoice, bill of sale, etc.) or by other legally-acceptable means that the system is owned by others. "Owner" does not include a person who holds an interest in an UST system or AST system solely for financial security purposes unless, through foreclosure or other related actions, the holder of such security interest has taken legal possession of the UST system or AST system.

No. 6.

PST-Waste Manifest - The form furnished by the executive director to accompany shipments of petroleum-substance waste in order to track the movement and transference of petroleum-substance waste.

Partial closure - The closure of a petroleum-substance waste management unit in accordance with the applicable closure requirements at a facility that contains other active petroleum-substance waste management units.

Person - Any individual, corporation, organization, government or governmental subdivision or agency, business trust, partnership, association or any other legal entity.

Personnel or facility personnel - All persons who work at or oversee the operations of a waste management facility, and whose actions or failure to act may result in noncompliance with the requirements of this subchapter.

Petroleum substance - A crude oil or any refined or unrefined fraction or derivative of crude oil which is liquid at standard conditions of temperature and pressure. For the purposes of this subchapter, a "petroleum substance" shall be limited to one or a combination of the substances or mixtures in the following list except for any listed substance regulated as a hazardous waste under the federal Solid Waste Disposal Act, Subtitle C (42 United States Code §6921, et seq.):

- (A) Basic petroleum substances Crude oils, crude oil fractions, petroleum feedstocks, and petroleum fractions.
- (B) Motor fuels see definition for "motor fuel" in §334.2 of this chapter (relating to Definitions).
 - (C) Aviation gasolines Grade 80, Grade 100, and Grade 100-LL.
 - (D) Aviation jet fuels Jet A, Jet A-1, Jet B, JP-4, JP-5, and JP-8.
 - (E) Distillate fuel oils No. 1-D, No. 1, No. 2-D, and No. 2.
 - (F) Residual fuel oils No. 4-D, No. 4-light, No. 4, No. 5-light, No. 5-heavy, and
 - (G) Gas-turbine fuel oils Grade O-GT, Grade 1-GT, Grade 2-GT, Grade 3-GT,
- and Grade 4-GT.

 (H) Illuminating oils Kerosene, mineral seal oil, longtime burning oils, 300 oil, and mineral colza oil.
- (I) Solvents Stoddard solvent, petroleum spirits, mineral spirits, petroleum ether, varnish makers' and painters' napthas, petroleum extender oils, and commercial hexane.
 - (J) Lubricants Automotive and industrial lubricants.

- (K) Building materials Liquid asphalt and dust-laying oils.
- (L) Insulating and waterproofing materials Transformer oils and cable oils.
- (M) Used oils See definition for "used oil" in §334.2 of this chapter (relating to Definitions).
- (N) Any other petroleum-based material having physical and chemical properties similar to the above materials and receiving approval by the executive director for designation as a petroleum substance.

Petroleum substance waste - Any waste, excluding hazardous waste and liquid wastes, which is generated as a result of a release of a petroleum substance from an underground storage tank or a petroleum product from an aboveground storage tank regulated by the commission pursuant to the Texas Water Code, Chapter 26, Subchapter I.

Public water system - A system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly services an average of at least 25 individuals daily at least 60 days out of the year.

Registration - Written authorization issued by the executive director, which, by its conditions, may authorize the registrant to construct, install, modify, or operate a petroleum-substance waste storage or treatment facility or unit in accordance with specified limitations.

Representative sample - A sample of a universe or whole (e.g., waste pile, groundwater) which can be expected to exhibit the average properties of the universe or whole.

Reuse of petroleum-substance wastes - The process by which a petroleum-substance waste is utilized as an effective substitute for a commercial product, such as the proper use as a component of stabilized road base or use as fill for LPST tankholds.

Run-off - Any rainwater, leachate, or other liquid that drains over or into land from any part of a facility, land surface treatment unit, or stockpile.

Run-on - Any rainwater, leachate, or other liquid that drains over land onto or into any part of a facility, land surface treatment unit, or stockpile.

Saturated zone or zone of saturation - That part of the earth's crust in which all voids are filled with water.

Secondary containment - A system designed and constructed to collect rainfall run-on and to contain spills, leaks, or discharges within the facility without environmental contamination until such waste can be removed

Shipment - Any action involving the conveyance of petroleum-substance waste by any means to or from a site.

Sole-source aquifer - An aquifer designated pursuant to the Safe Drinking Water Act of 1974, §1424(e) which solely or principally supplies drinking water to an area, and which, if contaminated, would create a significant hazard to public health. The Edwards Aquifer has been designated a sole-source aquifer by the United States Environmental Protection Agency. The Edwards Aquifer Recharge and Transition Zones are specifically those areas delineated on maps in the offices of the executive director.

Spill - The spilling, leaking, pumping, emitting, emptying, or dumping of wastes or materials which, when spilled, become wastes into or on any land or water.

Storage - The holding of petroleum-substance waste for a temporary period, prior to the final treatment, disposal of, reuse, or storing of the waste elsewhere.

Stockpile - A soil storage area from which all petroleum-substance wastes are removed for treatment or final disposition and from which all wastes are removed at the time of closure of the facility.

Thermal treatment unit - An enclosed device using controlled flame combustion, microwave, UV, infrared, or other thermal treatment process.

Treatment - Methods which are designed to change, by physical, chemical, or biological means, the levels of contamination of the waste in order to render the waste suitable for reuse or disposal. The term treatment does not include the reduction of contaminant levels by dilution.

Treatment facility - A facility or unit which treats, recycles, and/or reuses petroleum-substance wastes.

Transporter - Any person who conveys or transports petroleum-substance waste by truck, ship, pipeline, or other means.

Underground storage tank - Any one or combination of underground tanks and any connecting underground pipes used to contain an accumulation of regulated substances, the volume of which, including the volume of the connecting underground pipes, is ten percent or more beneath the surface of the ground.

Unsaturated zone or zone of aeration - The zone between the land surface and the water table.

Uppermost aquifer - The geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected within the facility's property boundary.

Waste management area - Any area on which one or more waste management units resides.

Waste management unit - A contiguous area of land on or in which petroleum substance waste is placed, or a structure or machine used to store or treat waste pursuant to a registration issued under this subchapter. Examples of waste management units include a waste stockpile, a land surface treatment area, a thermal treatment unit, a stockpile, a tank and its associated piping and underlying containment system, and a container storage area.

Wetlands - Those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

Adopted December 4, 1996

Effective December 27, 1996

§334.482. General Prohibitions.

- (a) No person may cause, suffer, allow, or permit the storage, treatment, transport, reuse, or disposal of petroleum-substance waste except as authorized by this subchapter and the rules of the commission.
- (b) Notwithstanding subsection (a) of this section, a person may apply for a variance from the requirements of this subchapter. The executive director shall have the sole discretion to grant a variance, if in his opinion the requirement(s) of this subchapter is/are not practical or reasonable under the circumstances. Any request for a variance must be in writing and of sufficient detail to allow the executive director to make an informed determination. A request for variance must be approved by the executive director before a person may perform an activity or procedure which is not specifically authorized by this subchapter.

Adopted December 4, 1996

Effective December 27, 1996

§334.483. Disposal by Generator.

A generator of petroleum-substance waste may not finally dispose of petroleum-substance waste at a site or facility unless the site or facility is authorized to receive such wastes pursuant to one of the following:

- (1) permit issued by the commission pursuant to Chapter 335 of this title (relating to Industrial Solid Waste and Municipal Hazardous Waste) or Chapter 330 (relating to Municipal Solid Waste Management);
- (2) authorization issued jointly by the Texas Railroad Commission and the commission for a facility currently permitted by the Railroad Commission; or
 - (3) §334.501 of this title (relating to Reuse of Petroleum-Substance Waste)

§334.484. Registration Required for Petroleum-Substance Waste Storage or Treatment Facilities.

- (a) A person shall submit the required application and receive the appropriate registration issued after the effective date of these rules prior to storing or treating petroleum-substance wastes at a new Class A facility or treating soil utilizing a new Class B waste management facility.
- (b) A person may not commence physical construction of a new Class A or utilize a Class B petroleum-substance waste management facility without first having submitted the required application and received the appropriate registration unless otherwise authorized by the executive director.

- (c) Any person who intends to store or treat petroleum-substance waste at a Class A or Class B facility after the effective date of this subchapter shall submit an application for registration on a form approved by the executive director. Such person shall submit information to the executive director which is sufficiently detailed and complete to enable the commission to determine whether such storage or treatment is compliant with the terms of this subchapter. Such information shall include, at a minimum:
 - (1) information concerning the location of the facility;
 - (2) identification of the facility owner, facility operator, and landowner;
 - (3) the job descriptions of all key operating personnel;
- (4) documentation on the proposed access routes to the facility, proposed daily volumes of traffic associated with the facility, and confirmation on the suitability of roads leading to the facility;
 - (5) waste storage, management, handling, and shipping methods;
 - (6) waste treatment methods;
 - (7) waste sampling and analytical methods;
 - (8) disposition or reuse documentation;
 - (9) recordkeeping requirements;
 - (10) security and emergency procedures;
- (11) facility closure plan and closure cost estimate (see §334.508 of this title (relating to Closure Requirements Applicable to Class A and Class B Facilities));
 - (12) facility plans and specifications;
 - (13) site maps and vicinity maps;
 - (14) documentation on the land use in the vicinity of the facility;
- (15) identification of all potential contaminant receptors in the vicinity, including any water wells within 1,000 feet;
 - (16) documentation on the financial assurance required (see §334.508 of this title);
 - (17) documentation on all required restrictive easements;
 - (18) the geology and hydrogeology where the facility is located;
 - (19) documentation on the effectiveness of the treatment method;

- (20) documentation of the receipt of any additional authorization required by any other federal, state, or local regulatory agency; and
- (21) any other information as the executive director may deem necessary to determine whether the facility and operation thereof will comply with the requirements of this subchapter. The application shall be submitted to the executive director of the commission, and a copy shall be submitted to the commission's field office in the district where the proposed facility will be located.
- (d) If the applicant is other than an individual, the application shall be signed by the owner or operator of the facility, the president or chief executive officer of the company, or all the partners of the company.
- (e) Any person who stores or treats petroleum-substance waste shall have the continuing obligation to immediately provide written notice to the executive director of any changes or additional information concerning the information submitted to the commission or activities authorized in any registration within fifteen (15) days of the change or from the date the additional information was acquired.
- (f) Any information required by this subsection shall be submitted to the executive director's office in Austin and to the appropriate region office.
- (g) The registration is not transferable to any other facility or facility owner. Any transfer of ownership shall require a change in registration of the facility. However, a change in registration of a facility shall not relieve the transferor of any liability which may have been incurred prior to the change in registration.
- (h) The applicant or a person affected may file with the chief clerk of the commission a motion for reconsideration under §50.39(b) (f) of this title (relation to Motion for Reconsideration) of the executive director's final approval or denial of an application for registration.

Effective December 27, 1996

§334.485. Suspension or Revocation of Registration.

- (a) A registration may be suspended or revoked for the following reasons:
- (1) if the registrant fails to maintain complete and accurate records required under this subchapter;
- (2) if the registrant falsifies information in, or omits material information from, any records or documents maintained, received, or required by this chapter;
- (3) if the registrant fails to comply with any rule or order entered by the commission pursuant to the requirements of Chapter 334 of this title (relating to Underground and Aboveground Storage Tanks);

- (4) if the registrant fails to maintain insurance or financial assurance as required by this subchapter;
- (5) if the registrant exceeds maximum allowable inventory without prior written authorization from the executive director; or
- (6) for any good cause which, in the opinion of the executive director, constitutes grounds for suspension or revocation of the registration.
- (b) If the executive director determines that good cause exists for suspension or for revocation of a registration, he shall petition the commission for an order, suspending or revoking the registration.
- (1) The executive director shall notify the registrant in writing, by registered or certified mail, of the grounds for the suspension or revocation, and provide the registrant with an opportunity for hearing on the executive director's petition.
- (2) The executive director shall provide notice at least ten days prior to the date of the hearing.
- (3) The registrant shall be afforded an opportunity to answer the executive director's petition for suspension or revocation in the manner generally described by this title.
- (4) A registration may be suspended for any length of time which is warranted in the opinion of the commission. The commission may impose terms and conditions on the suspension, as well as conditions for reinstatement of the registration.
- (5) If the term of the suspension does not exceed the original term of the registration, the registrant does not need to reapply at the termination of the suspension.
 - (6) A revocation pursuant to this section is permanent.

Effective December 27, 1996

§334.486. Denial of Application for Registration or Renewal.

- (a) The executive director may deny an application for registration or an application for renewal of registration of a facility under this subchapter for the following reasons:
- (1) if the applicant fails to meet any of the requirements set forth in §334.484 of this title (relating to Registration Required for Petroleum-Substance Waste Storage or Treatment Facilities);
 - (2) if the applicant fails to comply with any rule or order of the commission;
- (3) if the applicant submits false information on or omits material information from the application or any other documentation required to be maintained or submitted under this chapter; or

- (4) for any good cause which in the opinion of the executive director constitutes grounds for denial of the application for registration.
 - (b) Denial of an application for registration is without prejudice.

Effective December 27, 1996

§334.487. Renewal of Registration.

- (a) All registrations under this subchapter shall expire five years from the date of issuance.
- (b) The commission shall notify each registrant in writing of the impending registration expiration at least 60 days prior to the expiration of the registration.
 - (c) The executive director shall provide application forms for renewal of a registration.
- (d) A properly completed application for renewal shall be submitted to the executive director at least 30 days prior to the expiration date of the registration. The current registration shall be valid until the executive director notifies the applicant of renewal or denial of the submitted renewal application, provided a properly completed application for renewal was submitted at least 30 days prior to the expiration date of the registration.
- (e) Upon proper completion of the registration renewal process, the executive director shall either issue a renewed registration indicating the expiration date or deny the application for renewal, as authorized by §334.486 of this title (relating to Denial of Application for Registration or Renewal).

Adopted December 4, 1996

Effective December 27, 1996

§334.488. Authorization for Class C and Class D Facilities.

Authorization for Class C and Class D facilities is issued by the executive director when the leaking petroleum storage tank (LPST) site is subject to a corrective action plan involving storage and treatment activities pursuant to §334.81 of this title (relating to Corrective Action Plan). Executive director approval of the corrective action plan for the storage or treatment activities shall constitute authorization for the Class C or Class D facility. A Class C or Class D storage or treatment facility shall remain in operation only as long as is necessary to store or treat the soil from that one LPST site and it shall not accept soil from any other site at any time. The underground or aboveground storage tank owner or operator shall ensure that the approved storage and treatment activities comply with the following applicable provisions: §\$334.482, 334.483, 334.490, 334.494, 334.496-334.503, and 334.505-334.507 of this title (relating to General Prohibitions; Disposal by Generator; Notification and Mobilization Requirements for Class B Facilities; Closure and Facility Expansion; Shipping Procedures Applicable to Generators of Petroleum-Substance Waste; Recordkeeping and Reporting Procedures Applicable to Generators; Shipping Requirements Applicable to Transporters of Petroleum-Substance Waste; Shipping Requirements Applicable to Owners or Operators of Storage, Treatment, or Disposal Facilities; Recordkeeping Requirements Applicable to Owners or Operators of Storage, Treatment, or Disposal Facilities; Additional Reports; Design and Operating Requirements of

Stockpiles and Land Surface Treatment Units; Reuse of Petroleum-Substance Waste; Security; Contingency Plan; and Emergency Procedures).

Adopted December 4, 1996

Effective December 27, 1996

§334.489. Exemptions.

The following are exempt from the requirements of this subchapter:

- (1) facilities which operate under the jurisdiction of the Texas Railroad Commission or for the purpose of disposal, facilities permitted or regulated under other commission rules promulgated under the Texas Health and Safety Code, Solid Waste Disposal Act, Chapters 361, 363, or 371; and
- (2) Leaking petroleum storage tank sites which treat petroleum-substance contaminated media if the media is treated in-situ in accordance with the provisions of Subchapter D of this chapter (relating to Release Reporting and Corrective Action). Such sites, however, are not exempt from the provisions of §334.482 of this title (relating to General Prohibitions);
- (3) petroleum contaminated soil treatment facilities located at municipal landfills that comply with §330.8 of this title (relating to Notification Requirements).

Adopted December 4, 1996

Effective December 27, 1996

§334.490. Notification and Mobilization Requirements for Class B Facilities.

In addition to the required registration under §334.484 of this title (relating to Registration Required for Petroleum-Substance Waste Storage or Treatment Facilities).

- (1) The owner or operator of a Class B facility shall notify the appropriate commission region field office at least 48 hours in advance of moving the treatment unit to the leaking petroleum storage tank (LPST) site.
- (2) The owner or operator of the Class B facility shall notify the local fire marshal or other appropriate fire official at least 48 hours in advance of moving the treatment unit to the LPST site.
- (3) The owner or operator of the underground or aboveground storage tank who intends to utilize a Class B facility at a particular LPST site shall obtain executive director approval pursuant to \$334.81 of this title (relating to Corrective Action Plan).
- (4) The Class B facility shall remain at the LPST site for only the time period necessary to complete the treatment, but no longer than 30 days, unless written authorization is obtained from the executive director.
- (5) The Class B facility owner or operator shall provide notice to the public by means of posting signs at the LPST site at least 14 days prior to moving the treatment unit onto the LPST site or within another time frame as approved by the executive director. The signs shall be legible from a distance of at

least 25 feet and shall be posted at all entrances to the facility. The signs shall state "Public Notice of Petroleum-Substance Contaminated Soil Treatment," the name and phone number of the treatment facility owner, the name and phone number of the tank owner or operator, the registration number of the treatment facility, the type of soil treatment to be conducted, and the date(s) the treatment will be conducted.

(6) The Class B facility owner or operator shall produce upon demand the registration certificate issued by the commission under this subchapter as well as any other permit or authorization required by law.

Adopted December 4, 1996

Effective December 27, 1996

§334.491. Notice to Owners or Operators.

- (a) Written notice shall be provided in accordance with this section to any person, including the tank owner and operator, with any offer to perform any services of storage, treatment, or reuse of petroleum-substance contaminated soil proposed after the effective date of these rules.
 - (b) The notice shall contain the following:
- (1) the facility registration number issued pursuant to this subchapter's registration requirements;
 - (2) the following disclaimer reproduced in its entirety:

"The registration of a storage or treatment facility by the Texas Natural Resource Conservation Commission does not constitute endorsement, licensing, or promotion of any storage or treatment facility. Registration does not imply that the Texas Natural Resource Conservation Commission guarantees the quality of the work performed or that the cost of the work will be reimbursed."

Adopted December 4, 1996

Effective December 27, 1996

§334.492. Public Notice.

The Class A facility owner or operator shall provide notice to the general public regarding the location, construction, operation, and potential impacts of the storage or treatment facility.

- (1) The facility owner or operator shall provide notice of the facility to the general public by means of a notice by publication and a notice by mail.
- (2) The notice shall contain, at a minimum, the following information in accordance with forms approved by the executive director:
- (A) the name, address, phone number, and contact person for the owner of the facility;

(B) the name, address, phone number, and contact person for the operator of the facility; (C) the name, address, phone number, and contact person for the landowner (if different from the facility owner); (D) the address and the physical description for the location of the facility; (E) notice to the public of the opportunity to submit written comments regarding the application for registration of the facility and to request a public meeting regarding the proposed facility within 30 days of the date of the notice; (F) notice that an application for registration has been filed with the Texas Natural Resource Conservation Commission; (G) a complete description of the activities which will be conducted at the facility, including details on the construction of the facility, the soil storage methods, the soil treatment methods, the final disposition of the treated soils, and documentation on any points of discharge; (H) the method for obtaining additional information on the facility. (3) The notice by publication shall be published in a newspaper published daily, if available, and generally circulated in the county or area where the proposed facility is to be located and within each county or area wherein persons reside who would be affected by the facility. (4) The notice by certified mail, return receipt requested, shall be sent to the following persons: (A) all adjacent landowners and all owners of property within 1,000 feet of the boundary of the facility as defined in the application; (B) the mayor and health authorities of the city in which the facility will be located, if applicable; (C) the county judge and county health authority of the county in which the facility will be located; (D) the appropriate state senator and representative for the area encompassing the facility;

in the facility. The executive director may designate persons or organizations in addition to those specified

by the facility owner or operator.

(E) all persons or organizations who have requested the notice or expressed interest

(5) The facility owner or operator shall provide copies of each notice sent by mail, copies of the published notice, and copies of the signed publisher's affidavits for the notices to the commission's Austin office and to the appropriate commission region office within two calendar days of publication and mailing.

Adopted December 4, 1996

Effective December 27, 1996

§334.493. Public Meetings for Class A Facilities.

- (a) The executive director may, in response to a request from the public or at his own discretion, require the Class A facility owner or operator to hold a public meeting whenever such a meeting might clarify one or more issues concerning an application for registration of a facility.
- (b) Upon request by the executive director, the Class A facility owner or operator, at his or her expense, shall schedule and hold a public meeting at a time and place which are convenient for the general public affected by the facility. Notice of the public meeting shall be provided by the Class A facility owner or operator to the public, not less than 30 days prior to the date of the meeting, in the manner described in §334.492(3), (4), and (5) of this title (relating to Public Notice).
- (c) The forum chosen for the meeting shall be accessible to persons who are mobility impaired. Prior to scheduling of the meeting, the applicant shall coordinate the scheduling of the meeting with commission personnel to ensure the availability of commission personnel for the meeting. The applicant shall confirm with the executive director the date, time, and location of the meeting not less than 15 days prior to the meeting. The meeting shall be open to the public to provide information on the proposed facility and to allow for comments by the public. The executive director will consider all comments relating to the requirements of this subchapter when determining the outcome of the registration application. The applicant shall again confirm with the executive director on the time and place of the meeting at least 72 hours prior to the meeting.
- (d) If the executive director does not request the Class A facility owner or operator to hold a public meeting as authorized by this section, no public meeting shall be required before the executive director may approve or deny an application for registration of a Class A facility.

Adopted December 4, 1996

Effective December 27, 1996

§334.494. Closure and Facility Expansion.

A person who stores or treats petroleum-substance waste at a Class A or B facility shall notify the executive director in writing of any closure activity or facility expansion not specifically stated in the original application for registration at least 30 days prior to conducting such activity. Such person shall submit to the executive director upon request such information as may reasonably be required to enable the executive director to determine whether such activity is compliant with this subchapter and whether additional public notice should be conducted. Any information provided under this section shall be submitted to the executive director's office in Austin and to the appropriate region field office.

§334.495. Location Standards for Class A Petroleum-Substance Waste Storage or Treatment Facilities.

- (a) The commission shall not issue a registration for a Class A petroleum-substance waste management facility unless it finds that the proposed site, when evaluated in light of proposed design, construction, and operational features, reasonably minimizes possible contamination of surface water and groundwater. In making this determination, the commission shall consider the following factors:
- (1) flooding or active geologic processes such as erosion, subsidence, submergence, and faulting;
- (2) groundwater conditions such as groundwater flow rate, groundwater quality, length of flow path to points of discharge, and aquifer recharge or discharge conditions;
- (3) soil conditions such as stratigraphic profile, stratigraphic complexity, and hydraulic conductivity of strata;
- (4) separation distance from the facility to the aquifer and to points of discharge to surface water; and
 - (5) climatological conditions.
 - (b) Class A storage or treatment facilities shall not be located:
 - (1) in the 100-year floodplain;
 - (2) in wetlands;
 - (3) on the recharge or transition zone of a sole-source aquifer;
- (4) within 1,000 feet of an established residence, church, hospital, school, licensed day-care center, or dedicated public park;
- (5) within 1,000 feet of any property owned by a person other than the facility owner unless the applicant obtains a variance from the executive director pursuant to subsection (d) of this section relating to variances;
- (6) in areas of direct drainage within 1/2 mile of any surface water if the surface water is used to supply public drinking water through a public water system, unless it is designed, constructed, operated, and maintained to prevent any releases of contaminants from the facility;
 - (7) in the critical habitat of an endangered species of plant or animal; or
- (8) in an area where the roads leading to the facility which will be utilized to transport soil are not adequate to handle the anticipated traffic volume and load.

- (c) Nothing in this subchapter shall be construed to require the executive director to issue a registration. In addition to an applicant's compliance with location requirements, the executive director will consider public comment on the proposed facility, surrounding land uses, past performance record if any, and enforcement history with the Texas Natural Resource Conservation Commission and other state agencies, when determining whether or not to register an applicant under this subchapter.
- (d) The executive director may, in his discretion, grant a variance of the requirements of subsection (b) of this section, relating to location requirements for Class A Facilities. Before the executive director may issue a variance under this subsection, he shall require the applicant to demonstrate that the provisions of subsection (b) of this section are not necessary to ensure adequate protection of human health and the environment.

Effective December 27, 1996

§334.496. Shipping Procedures Applicable to Generators of Petroleum-Substance Waste.

- (a) No generator shall transport petroleum-substance waste from the generating site unless the waste has been properly sampled in order to determine the levels of all possible contaminants in the waste. Necessary documentation shall, at a minimum, consist of documentation on the sampling, handling, chain-of-custody documentation, and copies of signed laboratory reports on samples collected from the specified wastes that contain results of analysis for:
- (1) the major components of the petroleum-substance waste such as benzene, toluene, ethyl benzene, total xylenes, and total petroleum hydrocarbons or the major components of total petroleum hydrocarbons; and
- (2) any other contaminants as specified by the executive director based on specific conditions of the generating site.
- (b) No generator of petroleum-substance waste within the State of Texas shall allow the transport of such wastes to an off-site waste storage, treatment, reuse, or disposal facility unless the following requirements are met:
- (1) a Texas Natural Resource Conservation Commission (TNRCC) petroleum-substance manifest is initiated, to include all applicable information, by the generator;
- (2) the generator designates on the manifest at least one facility or area legally authorized to receive the waste. A generator may also designate one alternate facility or area which is legally authorized to receive the waste in the event an emergency prevents delivery of the waste to the primary designated facility. If the transporter is unable to deliver the waste to either the designated facility or the alternate facility, the generator shall either immediately designate another facility for receipt or instruct the transporter to immediately return the waste. Upon such redesignation by the generator, the generator shall immediately prepare an amended waste manifest.
- (c) No generator of petroleum-substance waste from outside of the State of Texas shall allow transport of waste into the State of Texas unless the following requirements are met:

- (1) a TNRCC petroleum-substance manifest is initiated by the generator to include all applicable information;
 - (2) the manifest shall accompany the waste to the receiving facility;
 - (3) the waste is classified as nonhazardous by the state in which it is generated.
 - (d) At the time of waste transfer, the generator or generator's authorized representative shall:
 - (1) sign the manifest by hand;
- (2) obtain the handwritten signature of the initial transporter and date of acceptance on the manifest;
- (3) retain one copy, in accordance with §334.497 of this title (relating to Recordkeeping and Reporting Procedures Applicable to Generators); and
 - (4) give the transporter the remaining copies of the manifest.

Effective December 27, 1996

§334.497. Recordkeeping and Reporting Procedures Applicable to Generators.

Each generator of petroleum-substance waste shall comply with the following.

- (1) The generator shall keep records of all petroleum-substance waste activities regarding the quantities generated and shipped off-site for storage, treatment, or disposal and which, at a minimum, includes the information described in paragraphs (1)-(5) of this section. The maintained records shall be retrievable, legible, and immediately available for inspection and copying by commission personnel. The required records shall be sufficiently detailed and complete to support any contentions or claims made by the generator with respect to the following:
 - (A) the description, character, and classification of each waste;
 - (B) the quantity of waste and the date(s) it was generated;
 - (C) identification of the generating location and the tank owner or operator;
 - (D) the methods of storage, treatment, or disposal;
- (E) the quantity and date(s) the waste was shipped off-site for storage, treatment, or disposal including the name, address, and location of each off-site facility and transporter receiving shipments.

- (2) The generator shall retain a legible copy of each waste manifest required by §334.496 of this title (relating to Shipping Procedures Applicable to Generators of Petroleum-Substance Waste) for a minimum of five years from the date of shipment by the generator.
- (3) A generator of petroleum-substance waste shall keep records of all test results, waste analyses, or other determinations made for at least five years from the date that the waste was last sent to an off-site storage, treatment, disposal, or reuse area or facility.
- (4) A generator who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 35 days from the date the waste was accepted by the initial transporter shall contact the transporter and/or the owner or operator of the designated facility to determine the status of the petroleum-substance waste.
- (5) A generator shall submit an exception report to the executive director if the generator has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date that the waste was accepted by the initial transporter. The exception report shall be retained by the generator for at least five years from the date the waste was accepted by the initial transporter and shall include:
- (A) a legible copy of the manifest for which the generator does not have confirmation of delivery; and
- (B) a legible copy of a letter signed by the generator or his authorized representative explaining the efforts taken to locate the waste and the results of those efforts.
- (6) The periods of record retention required by this section may be extended by the executive director during the course of any unresolved enforcement action regarding the regulated activity.

Effective December 27, 1996

§334.498. Shipping Requirements Applicable to Transporters of Petroleum-Substance Waste.

- (a) No transporter shall ship petroleum-substance waste to an off-site storage, treatment, or disposal facility, unless the transporter:
- (1) obtains a manifest initiated by the generator in accordance with §334.496 of this title (relating to Shipping Procedures Applicable to Generators of Petroleum-Substance Waste); and
- (2) upon receipt and prior to shipment, signs and dates the manifest acknowledging the acceptance of waste from the generator where appropriate.
 - (b) The transporter shall ensure that the manifest accompanies the petroleum-substance waste.
- (c) No transporter shall deliver a shipment of petroleum-substance waste to another transporter designated on the manifest, unless the delivering transporter:

- (1) obtains the date of delivery and the handwritten signature of the accepting transporter on the manifest; and
 - (2) gives the legible copies of the manifest to the accepting transporter.
- (d) No transporter shall deliver a shipment of petroleum-substance waste to a storage, treatment, or disposal facility, unless the transporter:
- (1) obtains the date of delivery and the handwritten signature on the manifest of the owner or operator of the facility designated on the manifest; and
- (2) gives the copies of the manifest to the owner or operator of the storage, treatment, or disposal facility designated on the manifest.
- (e) The transporter shall deliver the entire quantity of petroleum-substance waste which the transporter has accepted from a generator or a transporter to:
 - (1) the designated facility listed on the manifest;
- (2) the alternate designated facility if the waste cannot be delivered to the designated facility because an emergency prevents delivery; or
 - (3) the next designated transporter.
- (f) If the transporter cannot deliver the waste in accordance with subsection (e) of this section, the transporter shall immediately contact the generator for further directions and shall revise the manifest according to the generator's instructions.

Effective December 27, 1996

§334.499. Shipping Requirements Applicable to Owners or Operators of Storage, Treatment, or Disposal Facilities.

- (a) No owner or operator of a storage, treatment, or disposal facility may accept delivery of petroleum-substance waste for storage, treatment, or disposal unless:
- (1) a Texas Natural Resource Conservation Commission (TNRCC) Petroleum Storage Tank (PST)-Waste Manifest accompanies the shipment which designates that facility to receive the waste;
- (2) the facility owner or operator signs the PST-Waste Manifest and immediately gives at least one copy of the signed PST-Waste Manifest to the transporter;
- (3) the facility owner or operator retains one copy of the PST-Waste Manifest in accordance with §334.500 of this title (relating to Recordkeeping Requirements Applicable to Owners or Operators of Storage, Treatment, or Disposal Facilities); and

- (4) within 30 days after receipt of the waste, the facility owner or operator sends a copy of the PST-Waste Manifest to the generator.
- (b) When a facility or reuse area receives petroleum-substance waste accompanied by a PST-Waste Manifest, the facility owner or operator, or his agent, or the owner or operator of the property designated for the reuse area shall note any significant discrepancies on each copy of the PST-Waste Manifest.
- (1) Significant discrepancies are differences between the quantity or type of waste designated on the PST-Waste Manifest and the quantity or type of waste a facility actually received. Significant discrepancies in type of waste are obvious differences which can be discovered by inspection or waste analysis.
- (2) Upon discovering a significant discrepancy, the facility owner or operator shall attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the facility owner or operator shall, within five days, submit to the executive director a letter describing the discrepancy and attempts to reconcile it, and a copy of the PST-Waste Manifest at issue. The facility owner or operator shall ensure that the waste is a petroleum-substance waste eligible for acceptance by the facility pursuant to this subchapter and shall report any unreconciled discrepancies discovered during any analyses or evaluation.
- (c) No owner or operator of a storage, treatment, or disposal facility in Texas shall accept wastes from an out-of-state generator or location unless the following requirements are met:
- (1) the waste is accompanied by legible copies of the signed TNRCC PST-Waste Manifest for all wastes received pursuant to §334.496 of this title (relating to Shipping Procedures Applicable to Generators of Petroleum-Substance Waste);
- (2) the facility owner or operator obtains documentation that the wastes contain only petroleum-substance contamination, have been generated from an underground or aboveground storage tank as defined in this chapter, and are classified as nonhazardous in the state where generated. This documentation shall consist of documentation on the sampling methods, sample handling, chain-of-custody documents, and legible copies of signed laboratory reports on samples collected from the specified wastes. The number of samples shall be sufficient to characterize the entire quantity of wastes. The analyses shall include:
- (A) volatiles and semi-volatiles by United States Environmental Protection Agency (EPA) Methods 8240 and 8270, respectively;
- (B) toxicity characteristic listed constituents as specified in 40 Code of Federal Regulations, Part 261;
- (C) organochlorine pesticides and polychlorinated biphenyls by EPA Method 8080; and
- (D) any other analyses necessary to characterize the wastes or as specified by the executive director; and/or

- (3) the facility owner or operator obtains documentation from the appropriate governing agency in the originating jurisdiction that the wastes are classified as nonhazardous and meet the definition of petroleum-substance wastes (as such wastes are defined in §334.2 of this title (relating to Definitions)), and provides such documentation to the executive director prior to receiving the out-of- state soils.
- (d) The facility owner or operator shall not accept any wastes for storage, treatment, or disposal from an in-state generator or location which contain any contaminants above natural background levels other than petroleum substances as defined in this subchapter, unless otherwise approved by the executive director. Documentation of the contaminants in the waste shall consist of a sufficient number of samples to characterize the waste and the samples shall be analyzed for all contaminants that may occur in that waste.

Effective December 27, 1996

§334.500. Recordkeeping Requirements Applicable to Owners or Operators of Storage, Treatment, or Disposal Facilities.

- (a) All records required by this subchapter shall be retained by the facility owner or operator for a minimum of five years from the date of receipt of the waste. The records shall be maintained in a secure location on the premises of the storage, treatment, or disposal facility and shall be immediately accessible by the facility owner and operator. In the event that copies of the required records cannot reasonably be maintained on the premises of the facility, such records may be maintained at a readily-accessible alternate site, provided that the following conditions are met.
- (1) If the facility is in operation, the records shall be readily accessible for reference by the facility owner and operator.
- (2) The records shall be readily accessible and available for inspection and copying upon request by commission personnel.
- (3) The facility owner or operator shall provide the following information in writing to the executive director and to the commission's appropriate region office:
 - (A) the specific location where the required records are maintained; and
- (B) the name, address, and telephone number of the authorized custodian of the records.
- (4) The written information required in paragraph (3) of this subsection shall be submitted with the application for registration and within 15 days after the records are moved to an alternate site from that specified in the registration.
- (b) For facilities which have completed the closure requirements and are no longer in service, the facility owner may submit the appropriate records required by this subchapter to the executive director in lieu of maintaining the records on the premises or at an alternate site, provided that the following conditions are met:

- (1) the facility owner shall provide written justification adequate to explain why the records cannot be maintained at a readily-accessible alternate site; and
- (2) the records shall be submitted at one time in one package for each facility, and the records shall be appropriately labeled with the facility identification number and location information.
- (c) A facility owner or operator who initiates a shipment of petroleum-substance waste from a treatment or storage facility shall comply with the generator standards contained in §334.496 of this title (relating to Shipping Procedures Applicable to Generators of Petroleum-Substance Waste) and §334.497 of this title (relating to Recordkeeping and Reporting Procedures Applicable to Generators) and this subsection.
- (d) The periods of record retention required by this subsection may be extended by the executive director during the course of any unresolved enforcement action regarding the regulated activity.
 - (e) The following information, at a minimum, shall be maintained by the facility owner or operator:
- (1) documentation on all shipments of contaminated media received at the facility as specified on the waste manifest;
 - (2) the method(s) of storage or treatment for all media received;
 - (3) the method of reuse or disposal of all wastes removed from the facility including:
 - (A) the location of final disposition;
 - (B) the quantity and contaminant levels of wastes placed at any and every location;
- (C) the name, work address, and work phone number of the authorized representative for the receiving facility or location. If the receiving facility cannot be identified by street address, other specifics shall be included to adequately identify the exact location;
- (D) the name, work address, and work phone number of the authorized representative for the landowner at the receiving location;
- (E) documentation on the soil sampling and analytical methods, chain-of-custody, and all analytical results for the soil received at the facility and transported off-site or reused on-site;
 - (F) a detailed description of the reuse methods;
 - (G) the date(s) of transport off-site and the dates of reuse;
- (H) legible copies of the authorization from the landowner at the receiving location pursuant to §334.503 of this title (relating to Reuse of Petroleum-Substance Waste);
 - (4) documentation on the operations at the facility, including:

- (A) information on the actual treatment efficiency of the unit;
- (B) documentation on the results of all air emissions monitoring;
- (C) any changes in the operations at the facility;
- (D) documentation on any releases, fires, or explosions and the measures taken to abate the situation;
- (5) monitoring data under §334.504 of this title (relating to Contaminant Assessment Program and Corrective Action) when required;
- (6) a summary of the types and volumes of any petroleum-substance waste received without manifests. This documentation shall include the following information:
 - (A) the dates the facility received the wastes;
- (B) the leaking petroleum storage tank or other identification number of the generating facility, and the names and addresses of the tank owner or operator and the transporter, if available:
- (C) a description and the quantity of each petroleum-substance waste the facility received which was not accompanied by a Petroleum Storage Tank-Waste Manifest;
 - (D) the method of storage and/or treatment for each petroleum-substance waste;
 - (7) any other information deemed necessary by the executive director.

Effective December 27, 1996

§334.501. Additional Reports.

The owner or operator of a Class A or Class B facility shall report to the executive director within 24 hours of the discovery of any releases, fires, explosions, breakdowns, shutdowns, releases, or spills which result or may result in the discharge of any contaminants to the ground, surface water, or groundwater.

Adopted December 4, 1996

Effective December 27, 1996

§334.502. Design and Operating Requirements of Stockpiles and Land Surface Treatment Units.

(a) A stockpile or land surface treatment unit located at any storage or treatment facility or at any leaking petroleum storage tank site shall have an appropriate means of preventing any discharge or release of petroleum-substance waste or petroleum-substance waste constituents into any media. This shall be accomplished with:

- (1) a synthetic, impermeable liner that is designed, constructed, and installed to prevent any migration of petroleum-substance wastes out of the stockpile or land surface treatment unit into the adjacent subsurface soil, groundwater, or surface water at any time during the active life (including the closure period) of the stockpile, or land surface treatment unit. The liner shall be constructed of materials that do not allow petroleum-substance waste or petroleum-substance waste constituents to migrate into the liner itself or into the adjacent subsurface soil, groundwater, or surface water during the active life of the facility. The liner shall:
- (A) be constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydro geologic forces), physical contact with the hydrocarbons or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operations;
- (B) be placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, tearing, or uplift;
- (C) be installed to cover all surrounding earth likely to be in contact with the petroleum-substance waste or leachate; and
- (D) contain a leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate and rainwater from the stockpile or land surface treatment unit. The facility owner and operator shall specify the design and operating conditions which will ensure that the leachate depth over the liner does not exceed the depth of soil on the liner. The leachate collection and removal system shall be constructed of materials that are:
- (i) chemically resistant to the hydrocarbons managed in the pile and the leachate expected to be generated; and
- (ii) of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying petroleum-substance wastes, petroleum-substance waste cover materials, and any equipment used at the stockpile or treatment unit; and
- (iii) designed and operated to function without clogging through the scheduled life of the stockpile or land surface treatment unit; or
- (2) an alternate design or operating practice that is effective in preventing any release or discharge and is approved by the executive director. The facility owner or operator shall demonstrate that the alternate design or operating practices, together with location characteristics, will prevent the migration of any petroleum-substance waste constituents into the soil, groundwater, or surface water at any future time. In deciding whether to approve the alternate design, the executive director will consider:
 - (A) the nature and quantity of the wastes;
 - (B) the proposed alternate design and operation;

- (C) the hydro geologic setting of the facility, including a tentative capacity and thickness of the liners and soils present between the stockpile or land surface treatment unit and groundwater or surface water; and
- (D) all other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to soil, groundwater, or surface water.
- (b) The facility owner or operator shall design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the stockpile or land surface treatment unit.
- (c) The facility owner or operator shall design, construct, operate, and maintain a run-off management system to prevent flow from a stockpile or land surface treatment unit.
- (d) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems shall be emptied and managed expeditiously in accordance with applicable state and federal requirements after storms to maintain design capacity of the system.
- (e) If the stockpile or land surface treatment unit contains any particulate matter which may be subject to wind dispersal, the facility owner or operator shall cover or otherwise manage the stockpile or land surface treatment unit to control wind dispersal.
- (f) The executive director may specify other design and operating practices that may be necessary to ensure that the requirements of this section are satisfied.
- (g) The facility owner or operator shall ensure that treatment is initiated on stockpiled soil within 90 days from the date of receipt at the facility and that the treated soil is removed from the facility for final disposition within 90 days after completing treatment.
- (h) In addition to the requirements specified in subsections (a)-(g) of this section, the facility owner or operator shall design, construct, operate, and maintain the land surface treatment unit to maximize the degradation, transformation, or immobilization of petroleum-substance waste constituents in the treatment area. At a minimum, the facility owner or operator shall specify the following items, if applicable, in the facility registration application:
 - (1) the rate and method of petroleum-substance waste application to the treatment area;
 - (2) measures to control soil ph.;
 - (3) measures to enhance microbial or chemical reactions (e.g., fertilization); and
 - (4) measures to control the moisture content of the treatment area.
 - (i) The facility owner or operator shall inspect the unit weekly and after storms to detect evidence of:
- (1) deterioration, malfunctions, or improper operation of run-on and run-off control systems; and

(2) improper functioning of wind dispersal control measures.

Adopted December 4, 1996

Effective December 27, 1996

§334.503. Reuse of Petroleum-Substance Waste.

- (a) Wastes that are intended for reuse are subject to all the applicable provisions of this subchapter, including, but not limited to, the following requirements: §§334.482, 334.496-334.500, and 334.502 of this title (relating to General Prohibitions; Shipping Procedures Applicable to Generators of Petroleum-Substance Waste; Recordkeeping and Reporting Procedures Applicable to Generators; Shipping Requirements Applicable to Transporters of Petroleum-Substance Waste; Shipping Requirements Applicable to Owners or Operators of Storage, Treatment, or Disposal Facilities; Record-keeping Requirements Applicable to Owners or Operators of Storage, Treatment, or Disposal Facilities; and Design and Operating Requirements of Stockpiles and Land Surface Treatment Units).
- (b) Recordkeeping and reporting requirements for any person who intends to reuse petroleum-substance wastes shall require that person to maintain records and provide to the executive director when requested such information deemed necessary by the executive director to ensure compliance with the requirements of this subsection. This information shall include, but is not limited to:
- (1) identification, address, and name of the authorized representative of the generating facility;
- (2) identification, address, and name of the authorized representative for the receiving facility or location;
 - (3) identification of the landowner of the receiving location or facility;
 - (4) the quantity, type, and contaminant levels of the reused wastes;
 - (5) documentation of the reuse methods and dates of reuse;
- (6) documentation that asphalt mix or road base mix meets the specifications required by the final user;
- (7) documentation that the landowner of the receiving location has approved the use of the reused wastes on his property.
 - (c) Reuse requirements are as follows.
- (1) Any person who intends to utilize petroleum-substance wastes for reuse shall obtain written approval from the landowner of the land on which the wastes will be placed. The landowner's approval shall be submitted to the executive director upon demand.
- (2) Petroleum-substance wastes shall be reused only in manners which are in accordance with §334.482 of this title and at contaminant levels specified by the executive director.

- (3) Petroleum-substance wastes may be reused under the following conditions.
- (A) Petroleum-substance wastes may be utilized in cold-mix-emulsion bituminous paving at a cold-mix asphalt-producing facility registered under the terms of this subchapter. The petroleum-substance waste shall be mixed with aggregate or other suitable materials at a rate which will result in a mixture meeting or exceeding the specifications required by the final user. The petroleum-substance waste shall contain less than 0.5 mg/kg for each component of benzene, toluene, ethyl benzene, and total xylenes prior to mixing. Authorization for the facility shall also be obtained from all other appropriate federal, state, or local governing agencies. Authorization from the owner of the road or other area where the asphalt is to be utilized shall be obtained prior to laying the asphalt.
- (B) Petroleum-substance wastes may be utilized in asphalt mix at hot-mix asphalt-producing facilities registered under this subchapter. The petroleum-substance waste shall contain less than 0.5 mg/kg for each component of benzene, toluene, ethyl benzene, and total xylenes prior to mixing. The petroleum-substance waste shall be mixed with aggregate at a rate which will result in a mixture meeting or exceeding the specifications required by the final user. Authorization for the facility shall also be obtained from all other appropriate federal, state, or local governing agencies. Authorization from the owner of the road or other area where the asphalt is to be utilized shall be obtained prior to laying the asphalt.
- (C) Petroleum-substance wastes may be utilized in road base or parking lot stabilized base when the base will be covered with concrete or asphalt if the contaminant levels of the soil prior to mixing into the stabilized base are less than 0.5 mg/kg for each component of benzene, toluene, ethyl benzene, and total xylenes, and less than 500.0 mg/kg total petroleum hydrocarbons or at contaminant levels otherwise specified by the executive director. The base shall be mixed according to the specifications required by the final user. Soil which is not mixed into stabilized road base shall meet the criteria for clean soil as specified by the executive director in order to be spread on a road or parking lot. The generator shall obtain prior written consent for the placement of the soil from the owner of the road (if different from the landowner).
- (D) Petroleum-substance wastes may be utilized in road base or parking lot stabilized base when the base will not be covered with asphalt or concrete if the contaminant levels are less than 0.5 mg/kg for each component of benzene, toluene, ethyl benzene, and total xylenes, and less than 200 mg/kg of total petroleum hydrocarbons or at contaminant levels otherwise specified by the executive director. The base shall be mixed according to the specifications required by the final user. The base shall be professionally mixed by a facility registered under the terms of this subchapter. Soil which is not mixed into stabilized road base shall meet the criteria for clean soil in order to be spread on a road or parking lot. The generator shall obtain prior written consent for the placement of the soil from the owner of the road (if different from the landowner).
- (E) Petroleum-substance wastes will be considered clean, and may be used as fill in another leaking petroleum storage tank site tankhold if the contaminant levels do not exceed 0.5 mg/kg for each component of benzene, toluene, ethyl benzene, and total xylenes, and 10.0 mg/kg total petroleum hydrocarbons. Other contaminant levels may be considered by the executive director if documentation indicates that there is no threat to public health or safety and if there is no threat of groundwater contamination at the receiving site. The owner of the underground storage tanks at the receiving facility, and

the landowner (if different from the tank owner) shall give written consent for this activity. The soil shall not be utilized in a tankhold in which a new tank installation will occur.

- (F) Petroleum-substance waste may be reused by alternative methods or contaminant levels deemed appropriate and as authorized by the executive director. The generator shall obtain authorization, including authorization pursuant to the requirements of this subchapter, from the executive director prior to reusing the waste by alternative methods.
- (G) The executive director may, in his discretion, grant a variance for the pretreatment requirements set forth in subparagraphs (A)-(E) of this paragraph. It shall be the burden of the applicant to apply for a variance under this subparagraph.

Adopted December 4, 1996

Effective December 27, 1996

§334.504. Contaminant Assessment Program and Corrective Action.

- (a) The facility owner or operator shall conduct an assessment when, in the opinion of the executive director, there exists a possibility of migration of contaminants into or adjacent to waters in the state. The assessment shall be capable of determining:
- (1) whether petroleum-substance waste or petroleum-substance waste constituents have entered the groundwater, surface water, or soils.
- (2) the rate and extent of migration of any petroleum-substance waste or petroleum-substance waste constituents in the soil, groundwater, or surface water; and
- (3) the concentrations of petroleum-substance waste or petroleum-substance waste constituents in the soil, groundwater, or surface water.
- (b) The owner or operator of the facility shall conduct corrective action at the facility when, in the opinion of the executive director, petroleum-substance waste constituents exist in the soil, groundwater, or nearby surface water at levels which are harmful to human health and safety or the environment.
- (c) The corrective action program shall be capable of preventing the migration of contaminants and shall prevent the contaminants from exceeding the levels determined by the executive director.
- (d) The facility owner or operator shall ensure that the corrective action measures under this subsection shall be initiated and completed within a reasonable period of time as determined by the executive director considering the extent of contamination. The executive director may issue additional directives should the corrective action activities prove to not be effective in reducing the contaminant levels at a sufficient rate.
- (e) The facility owner or operator shall report in writing to the executive director the effectiveness of the corrective action program. The facility owner or operator shall submit these reports to the commission's Austin office and to the appropriate commission region office upon request by the executive director.

Effective December 27, 1996

§334.505. Security.

(a) The facility owner or operator shall prevent unauthorized entry by persons or animals onto the facility.

(b) A facility shall have:

- (1) a 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the active portion of the facility; or
- (2) an artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff), which completely surrounds the active portion of the facility; and
- (3) a means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility).
- (c) A sign with the legend, "Caution-Unauthorized Personnel Keep Out" shall be posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to the active portion. The legend shall be written in English and in any other language predominant in the area surrounding the facility, and shall be legible from a distance of at least 25 feet. Existing signs with a legend other than "Caution-Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.
- (d) The owner or operator of the facility shall submit details of the proposed security measures in the application for registration.

Adopted December 4, 1996

Effective December 27, 1996

§334.506. Contingency Plan.

- (a) Each facility owner or operator shall have a contingency plan for each facility. The contingency plan shall be designed to minimize hazards to human health or the environment from fires, explosions, or any release of petroleum-substance waste or petroleum-substance waste constituents to air, soil, groundwater, or surface water.
- (b) The provisions of the plan shall be carried out immediately whenever there is a fire, explosion, or release of petroleum-substance waste or petroleum-substance waste constituents which could threaten human health or the environment.
- (c) The contingency plan shall describe the actions facility personnel shall take in order to respond to fires, explosions, or any release of petroleum-substance waste or petroleum-substance waste constituents to air, soil, groundwater, or surface water at the facility.

- (d) The plan shall list names, addresses, and phone numbers (office and home) of all persons qualified to act as facility emergency coordinators and this list shall be kept up to date. Where more than one person is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates.
- (e) The plan shall include a list of all emergency equipment at the facility, such as fire extinguishing systems, spill control equipment, communications, and alarm systems (internal and external). This list shall be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities.
- (f) The plan shall include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan shall describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by release of petroleum-substance waste or fires).
 - (g) A legible copy of the contingency plan and all revisions to the plan shall be:
 - (1) submitted to the executive director with the application for registration;
 - (2) maintained at the facility; and
- (3) submitted to all local fire departments or emergency response officials who may be called upon to provide emergency services.
 - (h) The contingency plan shall be reviewed, and immediately amended, if necessary, whenever:
 - (1) the facility registration is revised;
 - (2) the plan fails in an emergency;
- (3) the facility changes its design, construction, operations, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or release of petroleum-substance waste or petroleum-substance waste constituents, or changes the response necessary in an emergency;
 - (4) the list of emergency coordinators changes; or
 - (5) the list of emergency equipment changes.

Effective December 27, 1996

§334.507. Emergency Procedures.

(a) At all times, there shall be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator shall be

thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person shall have the authority to commit the resources needed to carry out the contingency plan.

- (b) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) shall immediately:
- (1) activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and
- (2) notify appropriate state or local agencies with designated response roles if their help is needed.
- (c) Whenever there is a release, fire, or explosion, the emergency coordinator shall immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of facility records or manifests, and, if necessary, by chemical analysis.
- (d) Concurrently, the emergency coordinator shall assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment shall consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that regenerated, or the effects of any surface water run-off from water or chemical agents used to control fire and heat-induced explosions).
- (e) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, the emergency coordinator shall report his findings as follows.
- (1) If the emergency coordinator's assessment indicates that evacuation of local areas may be advisable, the emergency coordinator shall immediately notify appropriate local authorities. The emergency coordinator shall be available to help appropriate officials decide whether local areas should be evacuated.
- (2) The emergency coordinator shall notify as soon as possible, but not later than 24 hours: during working hours, the local Texas Natural Resource Conservation Commission regional office; during non-working hours, the Texas Emergency Response Unit at (512) 239-2507 or the State Toll Free Emergency Hotline at 1-800-832-8224; and if federal reportable spill quantities are exceeded, the National Response Center (using their 24-hour toll free number 1-800-424-8802). The report shall include:
 - (A) name and telephone number of reporter;
 - (B) name and address of facility;
 - (C) time and type of incident (e.g., release, fire);

- (D) name and quantity of material(s) involved, to the extent known; and
- (E) the possible hazards to human health or the environment outside the facility.
- (f) During an emergency, the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other petroleum-substance waste at the facility. These measures shall include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.
- (g) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator shall monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.
- (h) Immediately after an emergency, the emergency coordinator shall provide for treating, storing, and/or disposing of recovered water, contaminated soil and surface water, and any other material that results from a release, fire, or explosion at the facility.
- (i) The emergency coordinator shall ensure that, in the affected area(s) of the facility, all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
- (j) The facility owner or operator shall notify the executive director and appropriate state and local authorities that the facility is in compliance with subsection (h) of this section before operations are resumed in the affected areas(s) of the facility.
- (k) The facility owner or operator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the facility owner or operator shall submit a written report on the incident to the executive director. The report shall include:
 - (1) name, address, and telephone number of the facility owner or operator;
 - (2) name, address, and telephone number of the facility;
 - (3) the facility's registration number;
 - (4) date, time, and type of incident (e.g. fire, explosion);
 - (5) name and quantity of material(s) involved;
 - (6) the extent of injuries, if any;
- (7) an assessment of actual or potential hazards to human health or the environment, where this is applicable; and
 - (8) estimated quantity and disposition of recovered material that resulted from the incident.

Effective December 27, 1996

§334.508. Closure Requirements Applicable to Class A and Class B Facilities.

- (a) The facility owner or operator shall submit his closure plan to the executive director for approval with the application for registration.
- (b) In the closure plan, the facility owner or operator shall address the following objectives and indicate how they will be achieved:
- (1) removal and decontamination of all structures, equipment, or improvements which will no longer be utilized at the facility;
- (2) removal and proper disposal or treatment and reuse of all petroleum-substance wastes from the facility; and
- (3) removal or treatment of any petroleum-substance waste and petroleum-substance waste constituents which exist above the established cleanup levels that have been released from the facility into the soil, groundwater, or surface water.
- (c) During the closure period, the facility owner or operator of a petroleum-substance treatment facility shall:
- (1) continue the contaminant assessment or corrective action at the facility as directed by the executive director;
- (2) maintain the run-on and run-off control systems required under §334.502 of this title (relating to Design and Operating Requirements of Stockpiles and Land Surface Treatment Units);
 - (3) control wind dispersal of particulate matter which may be subject to wind dispersal.
- (d) When closure is completed, the facility owner or operator shall submit to the executive director for approval certification both by the facility owner or operator and by an independent qualified hydro geologist, geologist, or an independent registered professional engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.
- (e) The facility owner or operator shall prepare a written estimate, in current dollars, of the cost of closing the facility in accordance with the closure plan as specified in subsections (a) and (b) of this section. The closure cost estimate shall equal the cost of closing at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan. The closure cost estimate shall be based on the costs to the facility owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary for the facility owner or operator. Notwithstanding other closure costs, such estimate shall also include the costs associated with third party removal, shipment off-site, and treatment or disposal off-site of the following wastes to an authorized storage, treatment, or disposal facility:

- (1) maximum inventory of wastes possible in storage and/or treatment units;
- (2) any contaminated soils, groundwater, or surface water generated as a result of releases at the site;
 - (3) wastes generated as a result of closure activities;
 - (4) contaminated storm water or leachate.
- (f) The closure cost estimate may not incorporate a positive cost that may be realized by the sale of petroleum-substance wastes, facility structures or equipment, land, or other facility assets at the time of partial or final closures rather than or in addition to waste disposal and clean-up costs. The facility owner or operator may also not incorporate a zero cost for petroleum-substance waste that might have economic value rather than the waste disposal cost.
- (g) The facility owner or operator shall revise the closure cost estimate whenever a change in the closure plan increases the cost of closure. The revised closure cost estimate shall be adjusted for inflation as specified in §37.131 of this title (relating to Annual Inflation Adjustments to Closure Cost Estimates).
- (h) The facility owner or operator shall keep the following at the facility during the operating life of the facility: the latest closure cost estimate prepared in accordance with subsections (e) and (f) of this section and, when this estimate has been adjusted for inflation, the latest adjusted closure cost estimate.
- (i) For the remaining financial assurance requirements, see Chapter 37, Subchapter K of this title (relating to Financial Assurance Requirements for Class A or B Petroleum-Substance Contaminated Soil Storage, Treatment, or Reuse Facilities).

Effective December 27, 1996